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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/558,719

11/29/2005

Marc Andre De Samber

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

WOOLCOCK, LENWORTH A

ART UNIT

PAPER NUMBER

2629

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/558,719	Applicant(s) DE SAMBER ET AL.	
	Examiner LENWORTH WOOLCOCK	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 November 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/29/2005, 09/21/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 2, 4, 7-11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon et al (US 2002/0135565) in view of Liess et al (US 2002/0104957).

Consider claims 1, 12 and 14, Gordon discloses an opto-electronic input device, wherein the input is formed by detected movements of an object, which input device is provided with an optical module comprising at least one light source with a resonant cavity for generating a measurement radiation beam, optical means for guiding the radiation beam to a plate close to the object, and conversion means for converting radiation from the measurement radiation beam, which is reflected by the object, into an electric signal (**see par. [0030]-[0031] and fig. 3**), wherein the optical module

comprises the light source mounted on a carrier plate, and the optical means comprise an optical component mounted on the carrier plate and aligned with the light source, from which optical component the measurement radiation beam emitted by the light source travels to the plate close to the object, characterized in that the plate comprises, close to the object, a first portion which is situated within a projection of the object and allows passage of the radiation beam and is situated in a fixed position with respect to the carrier plate, as well as a second portion which is situated within a projection of the object and is movable in a direction perpendicular to the carrier plate and comprises signaling means which, in the case of movement in the direction perpendicular to the carrier plate, issue a signal that can be perceived by a user of the device with one of his senses (**see par. [0032], Par. [0043, and fig. 3).**

Gordon does not specifically disclose the light source being a laser and the conversion means are formed by the combination of the resonant cavity of the laser and measurement means for measuring a change in the resonant cavity during operation, which change is caused by interference of the reflected radiation from the measurement radiation beam, which penetrates the resonant cavity, and the standing wave in the resonant cavity, and which is representative of a relative movement of the object with respect to the module, wherein the optical module comprises the laser mounted on a carrier plate.

Liess discloses a opto-electronic input device with a light source being a laser and the conversion means are formed by the combination of the resonant cavity of the laser and measurement means for measuring a change in the resonant cavity during

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operation, which change is caused by interference of the reflected radiation from the measurement radiation beam, which penetrates the resonant cavity, and the standing wave in the resonant cavity, and which is representative of a relative movement of the object with respect to the module, wherein the optical module comprises the laser mounted on a carrier plate **(see par. [0082]-[0084])**.

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Gordon, and have a laser and the conversion means are formed by the combination of the resonant cavity of the laser and measurement means for measuring a change in the resonant cavity during operation, which change is caused by interference of the reflected radiation from the measurement radiation beam, which penetrates the resonant cavity, and the standing wave in the resonant cavity, and which is representative of a relative movement of the object with respect to the module, wherein the optical module comprises the laser mounted on a carrier plate, as taught by Liess, thus providing a device with fewer components and easier to manufacture, as discussed by Liess **(see par. [0007])**.

Consider claim 2, Gordon discloses the signaling means comprise a press button and which provides an experience for the tactile sense of the user when it is pressed **(see par. [0028])**. Gordon does not specifically disclose a button which springs back after it has been pressed. However, a button which springs back when it is pressed would have been an obvious design choice to one skilled in the art at the time of the invention.

Consider claim 4, Gordon does not specifically disclose the press button comprises a thin, bent membrane of steel. However it would have been an obvious design choice to one skilled in the art at the time of the invention to use a button with a thin, bent membrane of steel.

Consider claims 7 and 8, Liess discloses the first portion of the plate comprises a body which is attached onto the carrier plate (**see fig. 8**), and the press button comprises, in the center thereof, a opening within which the body is situated, the upper face of said body being substantially flush with an upper face of the press button, or being situated so much lower as is necessary to enable the press button to be pressed (**see fig. 9**). Gordon does not specifically disclose a round, transparent, block shaped body, or a round opening. However it would have been an obvious design choice to have a round transparent block shaped body.

Consider claim 9, Liess discloses near the lower side of the body, the measurement radiation beam is introduced unto said body at an angle such that the measurement radiation beam moves spirally to an upper side of the body (**see fig. 11**).

Consider claim 10, Liess discloses the dimensions of the portions of the plate are suitable for an object that is formed by a human finger (**see fig. 1a**).

Consider claim 11, Liess discloses the laser is attached onto the carrier plate in such a manner that the resonant cavity of the laser is parallel to said carrier plate (**see par. [0082]**).

Consider claim 13, Liess discloses the object is formed by a finger of a human user of the device (**see fig. 1a**).

Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon et al (US 2002/0135565) in view of Liess et al (US 2002/0104957) in further view of Niederdrank (US 7174026).

Consider claim 3, Gordon does not specifically disclose the press button (5), upon being pressed, emits an acoustic signal that can be heard by the user. Niederdrank discloses the press button (5), upon being pressed, emits an acoustic signal that can be heard by the user **(see col. 2, lines 7-28)**.

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Gordon, and have the press button (5), upon being pressed, emits an acoustic signal that can be heard by the user, as taught by Niederdrank, thus providing a efficient way to interact with a person who is hearing impaired.

Consider claim 5, Liess discloses the device comprises a microphone by means of which the acoustic signal is converted to an electric signal **(see fig. 12 and 13, cell phone)**.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon et al (US 2002/0135565) in view of Liess et al (US 2002/0104957) in further view of Niederdrank (US 7174026) in further view of Jones et al (2004/0137929).

Consider claim 6, Gordon does not specifically disclose the electric signal is used to wake up the device from an energy-saving sleep mode. Jones discloses the electric

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signal is used to wake up the device from an energy-saving sleep mode (**see par. [0146]**).

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Gordon, Liess, and Niederdrank, and have the electric signal is used to wake up the device from an energy-saving sleep mode, as taught by Jones, thus conserving battery power.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LENWORTH WOOLCOCK whose telephone number is (571)270-5152. The examiner can normally be reached on M-F 8:30am - 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Mengistu can be reached on 571-272-7674. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lenworth Woolcock/
Examiner, Art Unit 2629

/Amare Mengistu/

Supervisory Patent Examiner, Art Unit 2629